REMARKS/ARGUMENTS

Claims 1-16 are pending in this application. By this Amendment, Applicants AMEND the Specification and claims 2-4, 7, 8, 12, and 13.

Applicants greatly appreciate the Examiner's indication that claims 1, 2, 6, 10, 11, 15, and 16 are allowable, and that claims 3-5, 7-9, and 12-14 would be allowable if amended to overcome the 35 U.S.C. §112, second paragraph rejection.

The Examiner objected to the Specification for containing minor informalities. Applicants greatly appreciate the careful and thorough consideration the Examiner has given the Specification. Applicants have amended the Specification to correct the minor informalities noted by the Examiner.

The Examiner has requested clarification of how the input and output impedance of surface acoustic wave filter device can be substantially equal and the input impedance is four times the output impedance or vice versa of the individual filters of surface acoustic wave device. Applicants respectfully submit that the input and output impedance of the surface acoustic wave filter device are determined by the connections of the individual surface acoustic wave filters that make up the surface acoustic wave filter device. For example, in the surface acoustic wave filter device shown in Applicants' **Figs. 1** and **10**, the output impedance of the surface acoustic wave filter device is substantially equal to the input impedance of the surface acoustic wave filter device because the impedances of the individual surface acoustic wave filters cancel each other out.

More specifically, in Fig. 1 (and similarly in Fig. 10), as described in the first paragraph on page 13, the impedance of the terminal 215 is about 4 times the impedance of the balanced signal terminal 212. Similarly, the impedance of the terminal 230 is about 4 times the impedance of the balanced terminal 227. Thus, the impedance of terminal 212 is z and the impedance of terminal 214 is 4z, and the impedance of terminal 227 is z and the impedance of terminal 230 is 4z. So to determine the impedance at the output, you add impedance of the two balanced

terminals 212 and 227, or z + z, which equals 2z. To determine the impedance at the unbalanced terminal 231 (input terminal), you add the inverse of the impedances of the two terminals 215 and 230 and determine what 1/z is according to Ohm's Law, i.e. 1/z = 1/4z + 1/4z, or 1/z = 1/2z. Thus, by solving this equation to determine z, the impedance z at the terminal 231 is equal to 2z (which is substantially equal to the impedance of the two balanced terminals 212 and 227, or 2z). This formula and calculation is done according to basic calculations based on Ohm's Law.

Regarding page 25, lines 18-23 of the specification, it appears that the Examiner has incorrectly interpreted this portion of the specification to disclose that the impedance of the unbalanced terminal 1129 of the entire filter device is about 4 times the impedance of the balanced terminals. In contrast, page 25, lines 18-23, disclose "**in the surface acoustic wave filter 1101**, the impedance of the terminal 1129 is preferably about four times the impedance of the surface acoustic wave filter 1114. Similarly, **in the surface acoustic wave filter 1115**, the impedance of the terminal 1129 is preferably different from the impedance of the terminal 1128" (emphasis added).

Thus, contrary to the Examiner's interpretation, page 25, lines 18-23 of the specification clearly sets forth that the impedance of the node of the surface acoustic wave filter 1101 which is connected to the unbalanced terminal 1129 is about 4 times that of the terminal 1114 of the surface acoustic wave filter 1101 and that the impedance of the node of the surface acoustic wave filter 1115 which is connected to the unbalanced terminal 1129 is different from the impedance of the terminal 1128 of surface acoustic wave filter 1115, **not** that the impedance of terminal 1129 of the entire filter device is about 4 times that of the terminal 1114.

Accordingly,- Applicants respectfully request reconsideration and withdrawal of the objection to the Specification.

The Examiner objected to claim 2 for containing a minor informality. Applicants have amended claim 2 to correct the minor informality noted by the Examiner. Accordingly, Applicants respectfully request reconsideration and withdrawal of the

objection to claim 2.

Claims 3-5, 7-9, and 12-14 were rejected under 35 U.S.C. §112, second paragraph as allegedly being indefinite.

As explained above, the output impedance of the surface acoustic wave filter device can be substantially equal to the input of the surface acoustic wave filter device depending upon how the individual surface acoustic wave filters are connected. Thus, Applicants respectfully submit that claim 1 is clear and definite.

Applicants have amended claims 3, 4, 7, 8, 12, and 13 to correct the minor informalities noted by the Examiner.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 3-5, 7-9, and 12-14 under 35 U.S.C. §112, second paragraph.

In view of the foregoing amendments and remarks, Applicants respectfully submit that claims 1-18 are allowable.

In view of the foregoing amendments and remarks, Applicants respectfully submit that this application is in condition for allowance. Favorable consideration and prompt allowance are solicited.

To the extent necessary, Applicants petition the Commissioner for a Three-month extension of time, extending to October 9, 2003, the period for response to the Office Action dated April 9, 2003.

The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1353.

Respectfully submitted,

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